

What is claimed is:

1. A composition comprising a particulate agglomerate of microcrystalline cellulose co-processed with from about 21% to about 99% by weight of an agent selected from the group consisting of silicon dioxide, aluminum silicate, magnesium aluminum silicate and precipitated amorphous silica, the microcrystalline cellulose and agent being in intimate association with each other and said agent being integrated with or at least partially coating said microcrystalline cellulose.
2. The composition of claim 1, wherein said silicon dioxide portion of said agglomerate is derived from colloidal silicon dioxide or fumed silica.
3. The composition of claim 1, wherein said silicon dioxide portion of said agglomerate is derived from a silicon dioxide having a surface area from about 10 m²/g to about 500 m²/g.
4. The composition of claim 1 wherein said composition is used in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wires and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.
5. A composition comprising a particulate agglomerate of microcrystalline cellulose co-processed with from about 1% to about 99% by weight of an agent selected from the group consisting of titanium dioxide, aluminum oxide, zirconium dioxide, dibasic calcium phosphate, polyvinyl pyrrolidone, carbon black, calcium sulfate and barium sulfate.
6. The composition of claim 5 wherein the microcrystalline cellulose and agent are in intimate association with each other and said agent is integrated with or at least partially coats said microcrystalline cellulose.
7. The composition of claim 5 wherein said composition is used in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wires and cable, ceramics for insulators and computers, heat

sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

8. A composition comprising a particulate agglomerate of microcrystalline cellulose co-processed with from about 1% to about 99% by weight of an agent selected from the group consisting of cellulose, starches, starch derivatives, polysaccharides, polypeptides, polyesters, polyalkanes, polyalkenes, polyalkynes, synthetic resins, natural resins and mixtures thereof.

9. The composition of claim 8 wherein the microcrystalline cellulose and agent are in intimate association with each other and said agent is integrated with or at least partially coats said microcrystalline cellulose.

10. The composition of claim 8 wherein said composition is used in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wires and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

11. A method of preparing a composition, comprising:

a) forming an aqueous slurry containing a mixture of microcrystalline cellulose in the form of wet cake and from about 21% to about 99% by weight of an agent selected from the group consisting of silicon dioxide, aluminum silicate, magnesium aluminum silicate and precipitated amorphous silica; and

b) drying said slurry to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent.

12. The method of claim 11, wherein, when said agent comprises silicon dioxide derived from colloidal silicon dioxide or fumed silica.

13. The method of claim 11, further comprising adding one or more viscosity modifying agents to said slurry prior to said step of drying said slurry.

14. The method of claim 11 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wires and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

15. A method of preparing a composition, comprising:

a) providing an aqueous slurry of microcrystalline cellulose in the form of wet cake;

b) providing an aqueous slurry containing an agent selected from the group consisting of silicon dioxide, aluminum silicate, magnesium aluminum silicate and precipitated amorphous silica; and

c) drying said aqueous slurry of microcrystalline cellulose in the form of wet cake and said aqueous slurry of said agent together in a drying chamber to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent, wherein said particles contain from about 21% to about 99% by weight of said agent.

16. The method of claim 15, wherein said agent comprises silicon dioxide derived from colloidal silicon dioxide or fumed silica.

17. The method of claim 15, further comprising adding one or more viscosity modifying agents prior to said step of drying.

18. The method of claim 15 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wires and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

19. A method of preparing a composition, comprising:

a) providing an aqueous slurry of microcrystalline cellulose in the form of wet cake;

b) providing an agent selected from the group consisting of silicon dioxide, aluminum silicate, magnesium aluminum silicate and precipitated amorphous silica in the form of a dried powder; and

c) drying said aqueous slurry of microcrystalline cellulose in the form of wet cake and said dry powder agent together in a drying chamber to obtain a composition comprising a plurality of agglomerated particles of said microcrystalline cellulose in intimate association with said agent, wherein said particles contain from about 21% to about 99% by weight of said agent.

20. The method of claim 19, wherein said agent comprises silicon dioxide derived from colloidal silicon dioxide or fumed silica.

21. The method of claim 19, further comprising adding one or more viscosity modifying agents prior to said step of drying.

22. The method of claim 19 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wires and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

23. A method of preparing an industrial composition, comprising:

a) forming an aqueous slurry containing a mixture of microcrystalline cellulose in the form of wet cake and an effective amount of an agent selected from the group consisting of titanium dioxide, aluminum oxide, zirconium dioxide, dibasic calcium phosphate, polyvinyl propylene, carbon black, calcium sulfate and barium sulfate; and

b) drying said slurry to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent.

24. The method of claim 23, wherein said agent is mixed with said microcrystalline cellulose in an amount from about 1% to about 99% by weight.

25. The method of claim 23, further comprising adding one or more viscosity modifying

agents to said slurry prior to said step of drying said slurry.

26. The method of claim 23 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wires and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

27. A method of preparing a composition, comprising:

a) providing an aqueous slurry of microcrystalline cellulose in the form of wet cake;

b) providing an aqueous slurry containing an agent selected from the group consisting of titanium dioxide, aluminum oxide, zirconium dioxide, dibasic calcium phosphate, polyvinyl propylene, carbon black, calcium sulfate and barium sulfate; and

c) drying said aqueous slurry of microcrystalline cellulose in the form of wet cake and said aqueous slurry of said agent together in a drying chamber to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent.

28. The method of claim 27, wherein said particles contain from about 1% to about 99% by weight of said agent.

29. The method of claim 27, further comprising adding one or more viscosity modifying agents prior to said step of drying.

30. The method of claim 27 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wire and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

31. A method of preparing a composition, comprising:

a) providing an aqueous slurry of microcrystalline cellulose in the form of wet

cake;

b) providing an agent selected from the group consisting of titanium dioxide, aluminum oxide, zirconium dioxide, dibasic calcium phosphate, polyvinyl propylene, carbon black, calcium sulfate and barium sulfate; and

c) drying said aqueous slurry of microcrystalline cellulose in the form of wet cake and said dry powder agent together in a drying chamber to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent.

32. The method of claim 31, wherein said particles contain from about 1% to about 99% by weight of said agent.

33. The method of claim 31, further comprising adding one or more viscosity modifying agents prior to said step of drying.

34. The method of claim 31 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wire and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

35. A method of preparing an industrial composition, comprising:

a) forming an aqueous slurry containing a mixture of microcrystalline cellulose in the form of wet cake and an effective amount of an agent selected from the group consisting of celluloses, starches, starch derivatives, polysaccharides, polypeptides, polyesters, polyalkanes, alkenes, alkynes, synthetic resins, natural resins and mixtures thereof; and

b) drying said slurry to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent.

36. The method of claim 35, wherein said agent is mixed with said microcrystalline cellulose in an amount from about 1% to about 99% by weight.

37. The method of claim 35, further comprising adding one or more viscosity modifying

agents to said slurry prior to said step of drying said slurry.

38. The method of claim 35 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wire and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

39. A method of preparing a composition, comprising:

- a) providing an aqueous slurry of microcrystalline cellulose in the form of wet cake;
- b) providing an aqueous slurry containing an agent selected from the group consisting of celluloses, starches, starch derivatives, polysaccharides, polypeptides, polyesters, polyalkanes, alkenes, alkynes, synthetic resins, natural resins and mixtures thereof; and
- c) drying said aqueous slurry of microcrystalline cellulose in the form of wet cake and said aqueous slurry of said agent together in a drying chamber to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent.

40. The method of claim 39, wherein said particles contain from about 1% to about 99% by weight of said agent.

41. The method of claim 39, further comprising adding one or more viscosity modifying agents prior to said step of drying.

42. The method of claim 39 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wire and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

43. A method of preparing a composition, comprising:

- a) providing an aqueous slurry of microcrystalline cellulose in the form of wet

cake;

b) providing an agent selected from the group consisting of celluloses, starches, starch derivatives, polysaccharides, polypeptides, polyesters, polyalkanes, alkenes, alkynes, synthetic resins, natural resins and mixtures thereof; and

c) drying said aqueous slurry of microcrystalline cellulose and said dry powder agent together in a drying chamber to obtain a composition comprising a plurality of agglomerated particles of microcrystalline cellulose in intimate association with said agent.

44. The method of claim 43, wherein said particles contain from about 1% to about 99% by weight of said agent.

45. The method of claim 43, further comprising adding one or more viscosity modifying agents prior to said step of drying.

46. The method of claim 43 further comprising using said composition in an industrial application selected from the group consisting of coatings and pigments, cosmetics and sunscreen, insulating additive for wire and cable, ceramics for insulators and computers, heat sinks, spark plugs, colored paper, pet foods and animal feed, paint, adhesives, electroplating, carbon black in cement and mortar, catalytic converters and electronic adhesives.

47. The composition of claim 1, wherein the composition has a median particle size from about 5 μm to about 350 μm .

48. The composition of claim 1, wherein the composition has a median particle size from about 65 μm to about 350 μm .

49. The composition of claim 1, wherein the composition has a median particle size from about 120 μm to about 200 μm .

50. The composition of claim 5, wherein the composition has a median particle size from about 65 μm to about 350 μm .

51. The composition of claim 8, wherein the composition has a median particle size from about 65 μm to about 350 μm .

52. The method of claim 11, wherein the composition has a median particle size from about 5 μm to about 350 μm .

53. The method of claim 11, wherein the composition has a median particle size from about 65 μm to about 350 μm .

54. The method of claim 11, wherein the composition has a median particle size from about 120 μm to about 200 μm .

55. The method of claim 15, wherein the composition has a median particle size from about 65 μm to about 350 μm .

56. The method of claim 19, wherein the composition has a median particle size from about 65 μm to about 350 μm .

57. The method of claim 23, wherein the composition has a median particle size from about 65 μm to about 350 μm .

58. The method of claim 27, wherein the composition has a median particle size from about 65 μm to about 350 μm .

59. The method of claim 31, wherein the composition has a median particle size from about 65 μm to about 350 μm .

60. The method of claim 35, wherein the composition has a median particle size from about 65 μm to about 350 μm .

61. The method of claim 39, wherein the composition has a median particle size from about 65 μm to about 350 μm .

62. The method of claim 43, wherein the composition has a median particle size from about 65 μm to about 350 μm .